

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A male connector for a guide wire, the male connector comprising:
  - a core wire,
  - a plurality of conductive members spaced apart longitudinally along said core wire,
  - a plurality of conductors disposed along the core wire, each conductor the conductors being connected to [[a]] one and only one respective conductive member, and insulating material,
  - wherein at least one of the conductors extends from at least about a distal end of the male connector, beyond a distal end of the one and only one [[a]] respective connected conductive member connected to the conductor towards a proximal end of the respective one and only one connected conductive member along at least a substantial portion of the respective one and only one connected conductive member,
  - wherein the at least one conductor extends from the distal end of the male connector, between the respective one and only one conductive member and a center of the male connector, beyond the proximal end of the respective one and only one conductive member, and then extends back between the respective one and only one conductive member and the center of the male connector such that an end of the at least one conductor extends towards the distal end of the respective one and only one conductive member,
  - wherein the [[an]] insulating material fixates the respective conductors inside the respective conductive members.
2. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is connected to the respective one and only one connected conductive member after passing by the distal end of the respective one and only one connected conductive member.

3. (Currently Amended) The male connector according to claim 2, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is connected to the proximal end of the respective one and only one connected conductive member.

4. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member extends through at least a substantial portion of the respective one and only one connected conductive member.

5. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member extends through the entire respective one and only one connected conductive member.

6. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is not connected to the respective one and only one connected conductive member at the distal end of the respective one and only one connected conductive member.

7. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is in a form of a loop which extends towards a proximal end of the male connector before extending back towards the distal end of the respective one and only one connected conductive member.

8. (Currently Amended) The male connector according to claim 7, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected

conductive member towards the proximal end of the respective one and only one connected conductive member in a loop which extends towards the proximal end of the male connector before extending back towards the distal end of the respective one and only one connected conductive member extends past the proximal end of the respective one and only one connected conductive member before extending back towards the distal end of the respective one and only one connected conductive member.

9. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is in a form of a loop which extends towards the proximal end of the male connector before extending back to the distal end of the respective one and only one connected conductive member, where the conductor is connected to the respective one and only one connected conductive member.

10. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member is disposed in the connector such that a portion of the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member bends substantially in the same manner as a portion of the respective one and only one connected conductive member.

11. (Currently Amended) The male connector according to claim 1, wherein the respective one and only one connected conductive member has a length L extending from the proximal end to the distal end of the respective one and only one connected conductive member, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member has a portion extending a length equal to L from the proximal end of the respective one and only one connected conductive member, and wherein a majority of the portion extending a length equal to L from the proximal end of the

respective one and only one connected conductive member is supported by the respective one and only one connected conductive member and adjacent insulator material.

12. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member does not contact the respective one and only one connected conductive member until after passing the distal end of the respective one and only one connected conductive member.

13. (Currently Amended) The male connector according to claim 1, wherein the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member extends in a loop outside the respective one and only one connected conductive member.

14. (Currently Amended) The male connector according to claim 13, wherein the at least one conductor extends in a loop and is connected to the respective one and only one connected conductive member at the proximal end of the respective one and only one connected conductive member.

15. (Currently Amended) The male connector according to claim 7, wherein the loop portion of the at least one conductor extending from beyond the distal end of the respective one and only one connected conductive member towards the proximal end of the respective one and only one connected conductive member lies outside the respective one and only one connected conductive member.

16. (Previously Presented) A male connector for a guide wire, the male connector comprising a core wire, a plurality of conductive members spaced apart longitudinally along said core wire, a plurality of conductors disposed along the core wire, the conductors being connected to a respective conductive member, wherein at least one of the conductors extends in a retrograde loop outside the respective connected conductive member before connecting to an inside of the respective connected conductive member.

17. (Previously Presented) The male connector according to claim 16, wherein the at least one of the conductors extending in a loop is connected to the respective connected conductive member at a proximal end of the respective connected conductive member.

18. (Currently Amended) ~~The [[A]] male connector according to claim 1, for a guide wire, the male connector comprising a core wire, a plurality of conductive members spaced apart longitudinally along said core wire, and a plurality of conductors disposed along the core wire, the conductors being connected to a respective conductive member, wherein at least one of the conductors passes by, immediately before connecting to the respective one and only one connected conductive member, a portion of the connector that has a greater stiffness than the stiffness of an entire portion of the connector between the plurality of conductive members, wherein an insulating material fixates the respective conductors inside the respective conductive members.~~

19. (Currently Amended) ~~The [[A]] male connector according to claim 1, for a guide wire, the male connector comprising a core wire, a plurality of conductive members spaced apart longitudinally along said core wire, and a plurality of conductors disposed along the core wire, the conductors being connected to a respective conductive member, wherein at least one of the conductors passes by, immediately before connecting to the respective one and only one conductive member, a portion of the connector that has a greater relative stiffness than a stiffness of a an extra continuous outer insulating material between the plurality of conductive members, wherein an insulator material fixates the respective conductors inside the respective conductive members.~~

20. (Currently Amended) ~~The [[A]] male connector according to claim 1, for a guide wire, the male connector comprising a core wire, a plurality of conductive members spaced apart longitudinally along said core wire, and a plurality of conductors disposed along the core wire, and an extra continuous outer insulating material between the plurality of conductive members, the conductors being connected to a respective conductive member, wherein at least one of the conductors passes by, immediately before connecting to the respective one and only one conductive member, a portion of the connector that has a greater relative stiffness than a portion of the connector between the respective one and only one connected~~

conductive member and ~~a the extra~~ continuous outer insulating material, ~~wherein an insulator material fixates the respective conductors inside the respective conductive members.~~

21. (Currently Amended) ~~The [[A]] male connector according to claim 1, for a guide wire, the male connector comprising a core wire, a plurality of conductive members spaced apart longitudinally along said core wire, and a plurality of conductors disposed along the core wire, the conductors being connected to a respective conductive member, wherein at least one of the conductors passes by, immediately before connecting to the respective one and only one conductive member, a portion of the connector that has a greater relative stiffness than a portion of the connector immediately past the proximal and distal ends of the respective one and only one connected conductive member, wherein an insulating material fixates the respective conductors inside the respective conductive members.~~

22. (New) The male connector according to claim 1, wherein an outer surface of the male connector is formed by an outer surface of the insulating material and outer surfaces of the conductive members, wherein the outer surface of the insulating material and the outer surfaces of the conductive members are coextensive such that the outer surface of the male connector is continuous, constant in diameter, and substantially uniform along a length of the male connector along a longitudinal axis of the male connector.